Docket No.: M076

(10) ABSTRACT

In cellular MOSFET transistor arrays using a geometric gate construction, deleterious inherent capacitance induced by the construction is substantially reduced by the use of plugs in between adjacent source regions of transistor source rows and adjacent drain regions of transistor drain rows of the array. Embodiments using field oxide, thicker step gate oxide, dielectric materials in a floating gate construction, and shallow trench isolation region plugs are described.